



# MODERN LIGHTS ON HISTORIC BUILDINGS

BRESCIA COLLEGE CASE STUDY

London, Ontario



**“The VEK-LED fixture really stands out for its high lumen output, adjustable head and easy installation. When you have more than 50 fixtures to install, these well thought out product features go a long way.”**

## BACKGROUND

Founded in 1919, Brescia University College is Canada’s only women’s University located in London, Ontario. The majestic, castle-like Brescia Hall was the first building designed back in 1923. It was later renamed as Ursuline Hall. The Mother St. James Memorial Building, which was completed in 1963, is the main building on campus. In September 2013, Brescia opened its new residence building, Clare Hall. The University has 1550 students during the year and also hosts weddings and corporate events in the summer.



VEK-LED78 on The Mother St. James Memorial Building



FL3-LED50 on Ursuline Hall



## LIGHTING CHALLENGE

The perimeters of the building had 57 HID fixtures that were more than 20 years old. These fixtures ranged in wattage from 70W – 250W. The legacy technology caused lighting challenges:

**1** The existing traditional wall packs distributed light in an uncontrolled manner, sending light in various directions. This type of fixture is not dark sky compliant and with aging HPS lamps, the light colour had turned yellow resulting in significant glare. Also, the lumen output from these wall packs had reduced 30 – 40%.

**2** Frequent maintenance was required as bulbs needed to be replaced 2 – 6 times every year and water had seeped into some fixtures.

**3** Maintenance was time consuming and expensive because some fixtures were mounted at a height of 30' and required special equipment and more than one electrician to access.



## THE RAB DESIGN SOLUTION:

Following an internal review, the University decided to upgrade the campus lighting in 2017. Facilities Management Supervisor, Cameron Mitchell, was looking to implement an energy efficient lighting system with a modern architectural design. After reaching out for advice from a local electrical distributor, Cameron received a complete lighting performance and energy efficiency audit. The distributor also made recommendations on LED lighting which would meet energy and lumen requirements and eliminate the need for ongoing maintenance.

RAB Design Lighting's premium LED wall light, the VEK-LED, together with FL-LED flood lights and CLB-LED canopy lights were identified as the optimal mix of fixtures for this project. The VEK-LED was installed on building perimeters; the FL-LED was installed on the rooftops of the The Mother St. James Memorial Building, while the CLB-LED was installed in the doorways of Ursuline Hall.



# PRODUCT HIGHLIGHTS

PREVIOUS FIXTURE	REPLACED BY	NUMBER OF FIXTURES	ENERGY SAVING
150W HPS Wall Pack	VEK2-LED52	24	65%
70W HPS Wall Pack	VEK1-LED26	22	63%
150W HPS Trunnion	FL2-LED30	5	80%
250W HPS Knuckle Mount	FL3-LED50	3	80%
70W Ceiling Mount	CLB-LED14	3	80%

In addition to the energy and maintenance saving of approximately \$5500 per year, Brescia University College also received a utility rebate of \$2225/- through the SaveonEnergy Program resulting in a payback period of less than two years.



### VEK-LED Series

The VEK-LED is a high performance wall light that is easy to install, very low on maintenance and offers up to 70% energy savings compared to HID wall packs. It features an adjustable head, integrated photocell, 5 conduit entries for easy installation, a separate enclosure for the driver for optimal heat sinking and a dimming driver for light control.



### FL-LED Series

The FL-LED fixtures are energy efficient, compact fixtures with wide beam optics ideal for floodlighting applications. These floods are rugged in design with die cast aluminum housing and polycarbonate lens. They feature multiple mounting options and wide beam optics.



### CLB-LED Series

The CLB-LED fixture is a slim profile round LED canopy light that features a hanging hook assembly for quick and easy installation. It also has a frosted lens that creates an even light distribution.

## CUSTOMER TESTIMONIALS:

"This LED Replacement project proved to be an effective solution for us. As winter approaches, our students are really starting to see the difference in light levels. The VEK fixtures do a great job in providing a safe and secure environment for everyone."

**- Chris Holmes, Project Manager, Brescia College**

"The VEK-LED fixture is a much better product than all the other fixtures we looked at for this project. It is extremely efficient at 103 lumens/watt. The adjustable head gave us the option to project light out where it was needed. The installation process was quick and simple. I could install these lights all on my own without any additional manpower. There was no need for me to drill any additional holes into the fixture. The level bubble saved time in aligning the fixtures. When you have more than 50 fixtures to install, these well thought out product features go a long way."

**- Cameron Mitchell, Facilities Supervisor, Brescia University College**

